

THE EVENING WORLD'S RADIO PHONE SERVICE COLUMN.

By Capt. Robt. Scofield Wood.
(D. F. C., M. C., Croix de Guerre
with four palms; formerly Commander
167th Squadron, Royal Air Force.)
A RADIO UNIT FOR \$25.

PART TWO.

The second part of this article is to be devoted to the assemblage of the necessary parts of a single tube detector, amplifier regenerative receiving set. In the accompanying sketch you will find every detail of the installation and assemblage of this set. The small parts have been accentuated for the purpose of clarity—for instance, the insulators on the aerial are represented greatly

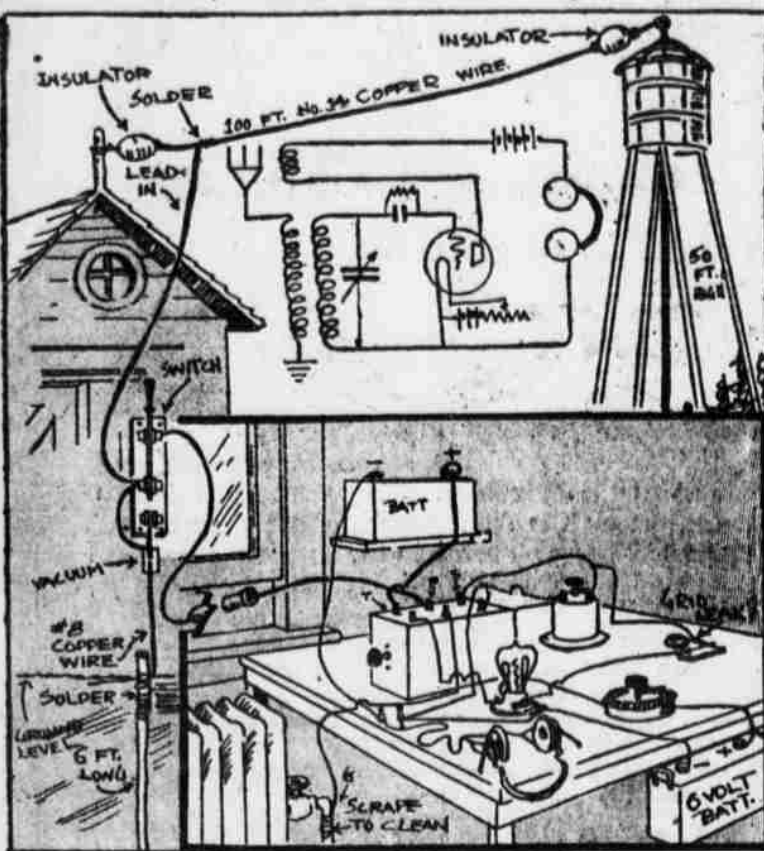
cast station WJZ at Newark, from which his words will be broadcast and picked up by a receiving set installed in the Long Island City plant. Eight loud speakers have been installed in the building itself and in a large circuit tent that has been erected alongside of the factory.

Mr. Ford is one of the first prominent executives to make use of this novel method of communication to talk to his associates.

RADIO DANCE FOR B BATTERY,

105TH P. A.

Battery B, 105th Field Artillery, will stage a radio concert in conjunction with an exhibition drill and dance, to be held at the armory at Clermont and



DETAIL OF ASSEMBLY OF A SINGLE TUBE DETECTOR SET.

out of proportion, as are several other small important parts.

Realizing the difficulty that some enthusiastic radio folks have in reading the conventional symbols of the ordinary hook-up, we have departed from the technical orthodox layout, and in a novel way show in the accompanying picture, so that any child can follow, the wiring and relative position of the instruments.

The aerial, as can be seen, is strung well above all surrounding objects and is a little over 100 feet long. The wire to use is stranded copper wire and insulated with two half insulators five inches in length, which can be purchased for about 15 cents each. The connection of the lead-in to the aerial is soldered and then brought down the wall on insulated brackets giving a clearance of five inches between the wall of the building and the lead-in wire. The lead-in wire should be rubber covered and the same gauge as the aerial, which is No. 14 B. & S. It should be brought into the house through an insulating tube in the wall or a wooden bulkhead set conveniently in a window. To the center pole of a 600-volt lightning switch the lead-in wire is soldered. In the lightning ground circuit is placed a vacuum gap lightning arrester which is always on guard in the event of accident from electric storms, whether the instrument is in operation or not. The outside or lightning ground is just a steel bar driven in to the ground about seven feet to which the No. 8 lightning ground copper wire is soldered.

The tuning device is the lattice weave spider coils described in Saturday's article. We will run through the instruments in the order of their line-up in the complete circuit and give the price of each in passing. The sketch is so very plain and descriptive that it leaves very little to be said.

The aerial is attached to one of the "sp" primary binding posts on the top of the coil box and the inside ground which is made to a water pipe or radiator is made to the other "sp" post. Next the secondary coil is attached by means of its binding posts to the variable condenser. From this condenser on wire goes to the fixed condenser across which is shunted the grid leak; from here the wire is carried to the binding post on the vacuum tube socket which is directly connected to the grid in the vacuum tube. Following the circuit of the current to the plate in the vacuum tube and to its connection on the V. T. socket, the wire is carried to only the tickler coil binding posts. The other post of the tickler coil is connected to the positive end of the "22" 22-volt storage battery. The negative end of the storage battery is attached to a binding post to which one of the phone connections is made. The other phone terminal is connected through a binding post to the wire that leads back to the variable condenser's other binding post. The negative side of the filament circuit is tapped in on the phone lead before it reaches the variable condenser. The positive end of the filament is attached to the rheostat through the binding post on the V. T. socket and to the 6-volt battery.

Price list of the articles:
1—TV 200 vacuum tube.....\$6.00
1—VT socket......75
1—Filament rheostat complete......60
1—Grid leak......25
1—Fixed condenser .00025 M.P......25
1—45 Plate variable condenser.....4.50
1—Pair of 1,500 ohm resistors.....5.00
1—22 volt "B" battery.....1.10
1—Six volt storage battery or dry cell......50
6—Binding posts......20

Dry cell batteries may be used in place of the expensive 6 volt storage battery, which costs from \$15 to \$20. The dry cells will only cost 20 cents apiece. The wire and solder and a few screws will be all that is needed. The aerial wire and insulators, plus the cost of the spider coils, will bring the total up to about \$25.

FORD TO SPEAK BY RADIO.

Henry Ford will use the radio telephone to-night at 7.30 P. M. to make a six-minute address to 5,000 automobile and tractor dealers at works of the Hellman Motor Sales Company, Bridge Plank, Long Island City.

Mr. Ford will speak by long distance phone from Detroit to the radio broad-

K D K A (Pittsburgh) 340 Metres

Commencing at 2.30, and at fifteen minute intervals thereafter, baseball scores.
7.30 P. M.—"Twelve White Swans," a bedtime story for the children.
7.45—Government market reports, and a report of the New York Stock Exchange.
8.00—Address by Marcus Rauh, President of the Pittsburgh Chamber of Commerce. Address by Dr. H. Foster Bain, Director of the Bureau of Mines. Review of business conditions by the National Industrial Conference Board.
8.15—The Human Side of Banking, by J. O. Miller, President of the East End Savings and Trust Company, Pittsburgh.

W J Z (Newark) 360 Metres

Features for the day:
Music every hour from 11 A. M. to 6 P. M.
Agricultural reports at 12 M. and 6 P. M.
Arlington official time at 11.55 to 12 M. and 5.55 to 6 P. M.
Babson statistical reports.
Shipping news at 2.05 P. M.
Weather reports at 11 A. M., 12 M., 5 P. M. and 6 P. M.

7.00 P. M.—Anderson's Fairy Tales translated by Signe Tokavig, read by Mr. Garton; courtesy of MacMillan Company. Mr. Garton will speak to the parents for a few minutes at 7.30 about the Juvenile Litter Library, which he originated, and the selection of children's books.
7.40 P. M.—"Death of Sitting Bull," by Capt. Frank Winch (the man with the radio voice), another frontier talk of historic interest which will include a thrilling description of the tragic and frenzied Indian ghost dance. Capt. Winch, famous angler and big game hunter, has proved to be one of the most popular speakers ever heard over the radio phone and is continuing his series of authoritative addresses on Western life by request.
8.00 to 9.30 P. M.—Concert under the direction of Chas. D. Isaacson, editor Our Family Music, New York Evening Mail. Programme: The Gwalia Welsh Glee Club of thirty-five men, Miss Grace Paul at the piano: "The Crusaders," Prothro; "Sweet Bye and Bye," Prothro; "The Martyr of the Arena," de Roille; "Lovely Maiden," Evans; "Castilla," Prothro; "March of the Men of Harlech" (Welsh patriotic song).

Miss Melba McCreery, soprano; Miss Rhea Silbert at the piano; "Aria From 'Aida,'" Verdi; "At the Well," Hagaman; "A Birthday," Woodman; Miss Maud Morgan, harpist; "Lamento," Hasselmann; "Fairy Legend," Oberthur.
"Face to Face With Lalo," Charles D. Isaacson.
J. C. Freund (editor and owner Musical America, "The Great World Cry

"We Need a Better Life," Rhys Morgan, tenor; Justine Williams at the piano. "Sound an Alarm," Handel.

Samuel Roberts, tenor; Mr. Williams at the piano: "Oh, Paradise" ("La Africaine"), Meyerbeer; "Mintu Gwip" (Welsh folk song).

9.35 P. M. to 10.15 P. M.—Claremont Male Quartet, William J. Shears, tenor; Frederick Baldwin, tenor; Dr. Howard Applegate, baritone; J. Leon Hedden, bass; Julius C. Zingg, F. A. G. O., accompanist and directors. Programme: Quartet, "Lost Chord," Sullivan; "Cotton Dolly," Geibel; "Cock Robin," Woodruff; "Little Tommy," Maey; "Romany," Nevins; "Kensucky Babe," Geibel; "Secrets," Smith; "Annie Laurie," arr. Geibel; "The Tack," Parks; "Stars of the Summer Night," "Circle Moon," Scott; "Shadow March," Prothro; sextet from "Lucia," Donizetti; Solo by Mr. Shears, "Little Mother of Mine," Burleigh; solo by Dr. Applegate, "Mandelay," Speaks; "Lindy Lee," Strickland. Solo by Mr. Baldwin, selected. Solo by Mr. Hedden, "Armorer's song," De Koven; duet by Mr. Baldwin and Dr. Applegate from "La Boheme," Puccini.

38 K. K. K. INVADE CHURCH.

Hooded, They Give Pastor Money for Charity—He Had Announced It.
BALTIMORE, April 17.—In full regalia, Knights of the Ku Klux Klan, following the example of two weeks ago, visited another Baltimore church last night and presented to the pastor an envelope supposed to contain money for charitable purposes. Last night it was at the Brooklyn Baptist Church. There seemed to be no secret about their coming. The congregation, said usually on Sunday nights to number only about 125, filled the church and overflowed into the street. The pastor, the Rev. J. W. Ford, informed the congregation of what was coming and urged that there be no disorder.
After the service began thirty-eight men arrived in six automobiles. They went into a basement and put on their white robes. The leader, whose robe had a red lining, bore on his hood the insignia, "MD—1."

\$6.50

MEN'S oxfords in the new spring patterns and leathers at six-fifty are now featured at all Walk-Over stores. It is a permanent Walk-Over price and is featured to show every man in New York the money's worth Walk-Over has made possible at \$6.50.

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Brooklyn
1355 Broadway, near Gates Ave.
565-7 Fulton St., opp. Hagner Place
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Bronx—557 Melrose Avenue, near 149th St.
Yonkers, N. Y.—7 N. Broadway
Paterson, N. J.—181 Market St.
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Gekco, Phoenix, and Van Raalte Hosiery

To the man who is on his feet all day

STANDING or walking all day long on hard floors and pavements is an **unnatural strain.**

The human foot was designed for soft dirt paths. Under modern conditions even the strongest physique suffers.

Of course hard leather heels give no relief. Ordinary rubber heels are little better. Some are soft, crumbly rubber that wears down quickly—others are so hard and lifeless that you might as well wear leather.

O'Sullivan's Safety Cushion Heels give you perfect protection. They combine just the right toughness for long hard wear with the greatest amount of springiness.

You'll never know how much a real shock-absorber can help you in your work until you wear O'Sullivan's. The strain of standing—the jar of walking—O'Sullivan's absorb them both.

The price of O'Sullivan's to you is generally the same as the price of ordinary heels, in spite of the fact that O'Sullivan's cost the dealer more. Your repairman could make a bigger immediate profit on any one of half a dozen substitutes—but when he puts on O'Sullivan's, he knows you'll bring trade to him again.

Ask for O'Sullivan's Safety Cushion Heels when you leave your shoes—see that they are attached. The O'Sullivan Heel Company.



Hard leather heels cannot protect you



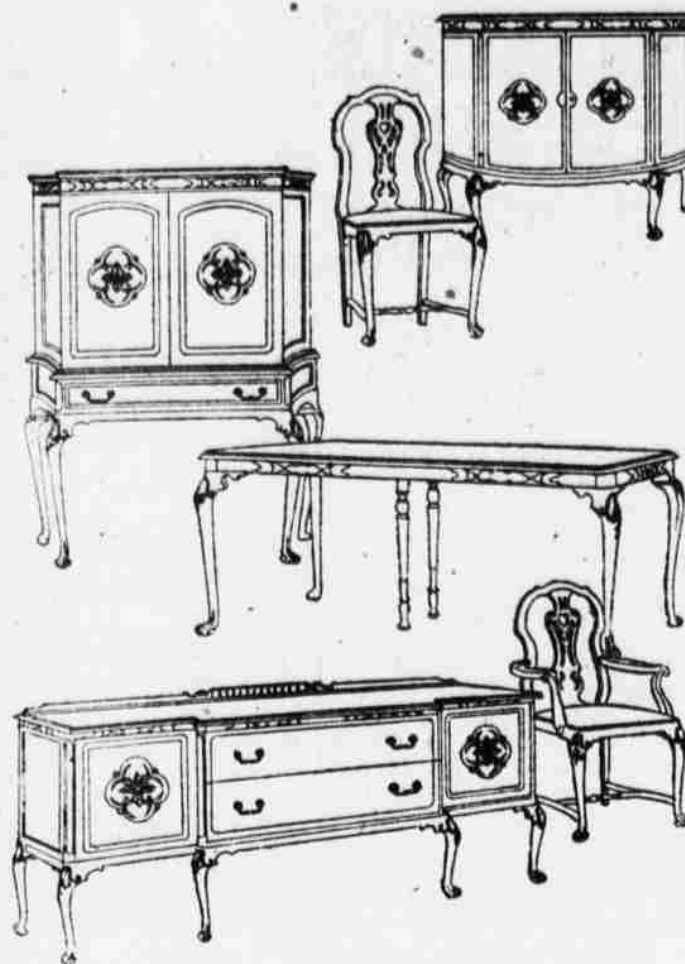
Ordinary rubber heels—either too hard or too soft



O'Sullivan's Safety Cushion Heels have maximum springiness combined with long life

Lord & Taylor

FIFTH AVENUE



Two Advance Days Before the

7-Day Furniture Sale

TUESDAY and Wednesday are still left to you to come in and inspect our complete floor of furniture, and to reserve any piece or suite you wish, before the opening of our 7-Day Furniture Sale.

Here you will find furniture that reveals not only the character of the master craftsmen of old but that fine tradition of durability which has survived for ages.

SIXTH FLOOR

Stern Brothers

WEST 42d ST.

(Between Fifth and Sixth Avenues)

WEST 43d ST.

Apparel and Dress Accessories for Women of Full Proportions

Just as much careful thought and painstaking skill have gone into the designing and workmanship of our apparel for the woman of extra size as for the smaller, more medium type—all of the prevailing modes have been adapted, not changed, to meet her needs—slenderized, and kept, first and foremost, youthful in line.

Happily, every item of her wardrobe can be selected here so as to reflect her own individuality and taste. Whatever material, shade, or fashion she most prefers she will find here. Not special styles just for stout women, but all styles especially for large women.

SUITS—Hand-tailored suits in a wide assortment, cut scientifically along youthful and slender lines. Sizes 40½ to 52½. Priced from 38.00 to 145.00.

COATS and COAT-WRAPs—for all occasions, in all styles and colors. Sizes 40½ to 52½. Priced from 39.50 to 125.00.

DRESSES—Youthful models in tailored, afternoon and evening gowns of any and every kind. Sizes 40½ to 50½. Priced from 24.50 to 135.00.

SEPARATE SKIRTS—for women who require extra sizes in waist bands and hip measure, and who also desire the utmost in smartness. Sizes 34 to 40 waist band. Priced from 9.50 to 24.50.

CORSETS—Every possible effort is made to make the fittings as perfect as the corsets themselves. All models for all wear, in medium, low and high styles. Sizes 28 to 38. Priced from 9.00 to 29.50.

BRASSIERES—Wide bandeau styles in brocade and heavy satin, hook front or back. Sizes 38 to 50. Priced from 1.50 to 7.00.

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Nightgowns. Sizes 46 to 50. Priced from 7.50 to 16.50.
Envelope Chemises. Priced from 5.95 to 10.50.
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